AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An isolated polynucleotide ~~comprising~~ consisting of a nucleotide sequence encoding the polypeptide represented by SEQ. ID. No.1,

wherein the amino acid sequence of SEQ ID No. 1 is the amino acid sequence for human hWAPL protein, which hWAPL protein is involved in development of cervical cancer that is induced by HPV infection.

2. (currently amended): The polynucleotide of Claim 1 ~~comprising the nucleotide sequence set forth in~~ wherein the nucleotide sequence encoding the amino acid sequence of SEQ. ID. No.1 is represented by SEQ. ID. No.2.

3. (canceled).

4. (canceled).

5. (currently amended): A recombinant expression vector comprising a polynucleotide ~~of Claim 1 or Claim 2~~ encoding a polypeptide of SEQ. ID. No.1, wherein said

polynucleotide is represented by SEQ. ID. No.2 and is operably linked to a promoter so as to allow expression of said polypeptide in a human host cell.

6. (canceled).

7. (currently amended): A ~~transformed~~ host cell ~~produced by transforming a host cell with~~ containing the recombinant expression vector of Claim 5, wherein the host cell is selected from a human cell-line.

8. (canceled).

9. (currently amended): A process for producing ~~the~~ a recombinant polypeptide ~~of Claim 3~~ or its salts of SEQ. ID. No.1, comprising the steps of:

~~transforming a host cell with a recombinant vector comprising a polynucleotide encoding the polypeptide represented by SEQ. ID. No. 1, thereby creating a transformed cell;~~

culturing the ~~transformed~~ host cell ~~whereby the transformed cell~~ of Claim 7 under conditions such that the host cell produces said polypeptide; and

collecting said recombinant polypeptide or its salts from the culture of the host cell.

10. (currently amended): A process for producing ~~the recombinant oncogenic~~ a recombinant hWAPL protein of ~~Claim 4~~ SEQ. ID. No.1 comprising the steps of:

~~transforming a host cell with a recombinant vector comprising a polynucleotide encoding an oncogenic protein with the amino acid sequence of SEQ. ID. No. 1, thereby creating a transformed cell;~~

culturing the ~~transformed~~ host cell ~~whereby the transformed cell~~ of Claim 7 under conditions such that the host cell produces said ~~recombinant oncogenic~~ hWAPL protein; and

collecting said recombinant ~~oncogenic~~ hWAPL protein from the culture of the host cell.

Claims 11-14 (canceled).

15. (currently amended): A polynucleotide probe consisting of ~~comprising~~ a nucleotide sequence that is complementary to a region of nucleotides 2511 to 2813 ~~nucleotide sequence~~ of SEQ. ID. No.2, wherein said polynucleotide probe has ~~at least a length of 15 to 300 bases~~ the same length as that of the region of nucleotides 2511 to 2813.

16. (currently amended): A probe hybridization kit, comprising the polynucleotide probe of Claim 15, wherein said kit is useful for detecting an mRNA corresponding to the nucleotide sequence of SEQ. ID. No.2 or cDNA prepared by the mRNA.

17. (canceled).

18. (currently amended): A primer pair ~~for PCR amplification of cDNA comprising the nucleotide sequence of SEQ. ID. No.2~~, consisting of the following paired primers:

~~a nucleotide sequence :~~

5'-TTGGATCCATGACATCCAGATTTGGGAAAACATACAGTAGG-3' (SEQ ID NO: 8); and

~~a nucleotide sequence :~~

5'-TTGAATTCCTAGCAATGTTCCAAATATTCAATCACTCTAGA-3' (SEQ ID NO: 9).

19. (currently amended): A primer pair ~~for PCR amplifyication of a partial cDNA comprising a nucleotide sequence of SEQ. ID. No.2~~, consisting of the following ~~paired~~ primers:

5'-GAATTCATAGGCACAGCGCTGAACTGTGTG-3' (SEQ ID NO: 5); and

5'-TTGAATTCCTAGCAATGTTCCAAATATTCA-3' (SEQ ID NO: 6).

20. (canceled).

21. (canceled).

22. (new): A method of using the polynucleotide of SEQ. ID. No.2 for construction of a recombinant vector comprising a polynucleotide encoding hWAPL protein of SEQ. ID. No.1;

wherein the polynucleotide of SEQ. ID. No.2 is used as a coding sequence to be translated into the polypeptide of SEQ. ID. No.1, and the method comprises the steps of:

preparing a double strand DNA comprising the polynucleotide of SEQ. ID. No.2 by means of PCR amplification using a primer pair consisting of the following primers:

5'-TTGGATCCATGACATCCAGATTTGGGAAAACATACAGTAGG-3' (SEQ ID NO: 8); and

5'-TTGAATTCCTAGCAATGTTCCAAATATTCAATCACTCTAGA-3' (SEQ ID NO: 9);

digesting the double strand DNA with HindIII/EcoR1 to obtain a DNA fragment; and

inserting the DNA fragment thus obtained into a mammalian expression vector to construct the recombinant vector.

23. (new): A method of using the polynucleotide of SEQ. ID. No.2 for construction of transformed cell by transforming a human host cell using a recombinant vector comprising the polynucleotide of SEQ. ID. No.2;

wherein the polynucleotide of SEQ. ID. No.2 is used as a coding sequence to be translated into the polypeptide of SEQ. ID. No.1, and the method comprises the steps of:

preparing a double strand DNA comprising the polynucleotide of SEQ. ID. No.2 by means of PCR amplification using a primer pair consisting of the following primers:

5'-TTGGATCCATGACATCCAGATTTGGGAAAACATACAGTAGG-3'(SEQ ID NO: 8); and

5'-TTGAATTCCTAGCAATGTTCCAAATATTCAATCACTCTAGA-3' (SEQ ID NO: 9);

digesting the double strand DNA with HindIII/EcoR1 to obtain a DNA fragment;

inserting the DNA fragment thus obtained into a mammalian expression vector to construct the recombinant vector; and

transfecting the recombinant vector to the human host cell to produce the transformed cell.

24. (new): A recombinant expression vector comprising a polynucleotide encoding the polypeptide of SEQ ID NO:1, wherein said polynucleotide is operably linked to a promoter so as to allow expression of said polypeptide.

25. (new): The recombinant expression vector of claim 24, wherein the polynucleotide is represented by SEQ ID NO:2.